

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
15 September 2005 (15.09.2005)

PCT

(10) International Publication Number
WO 2005/085917 A1

(51) International Patent Classification⁷: G02B 5/30, 27/28

(74) Agent: KORSHUNOV, Oleg; Weizmann Science Park,
Bldg. 22, P.O.B. 266, 76100 Rehovoth (IL).

(21) International Application Number:
PCT/IL2004/000707

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 2 August 2004 (02.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
160724 4 March 2004 (04.03.2004) IL
161196 31 March 2004 (31.03.2004) IL

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): NOVA MEASURING INSTRUMENTS LTD. [IL/IL]; Weizmann Science Park, Bldg. 22, P.O.B. 266, 76100 Rehovoth (IL).

(72) Inventors; and

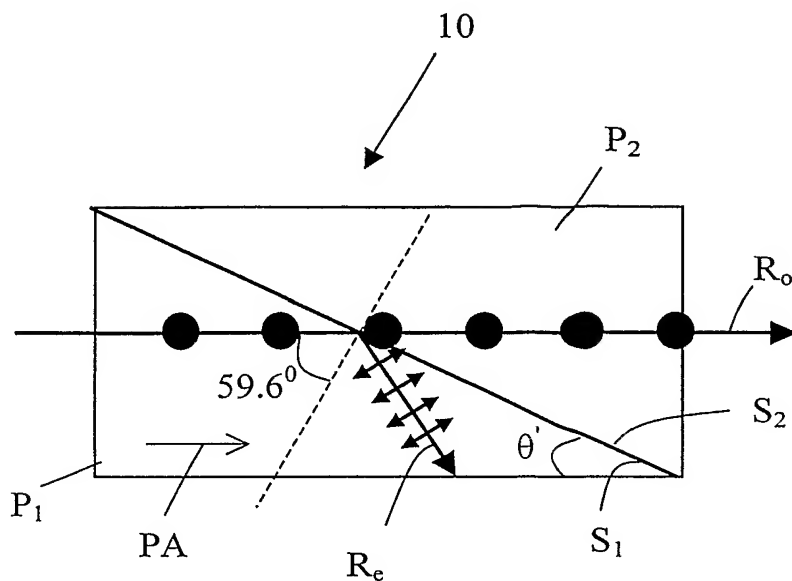
(75) Inventors/Applicants (*for US only*): WINIK, Michael [IL/IL]; 7, Shazar Street, 76804 Mazkeret Batya (IL). GOV, Shahar [IL/IL]; 26, Hadolev Street, 76335 Rehovoth (IL). FINAROV, Moshe [IL/IL]; 16/7, Einstein Street, 76470 Rehovoth (IL).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: GLAN-THOMPSON TYPE BROADBAND POLARIZER DEVICE FOR USE IN THE DEEP ULTRAVIOLET SPECTRAL RANGE AND METHOD OF ITS MANUFACTURE



(57) Abstract: A broadband polarizer device of a Glan-Thompson type is described, as well as a method of manufacturing such device. Such parameters as a material of the polarizer prisms, the prisms' configuration and a glue material, are selected so as to ensure total internal reflection for the broadband input light, including DUV spectral range (from about 190nm). The glue material is selected so as to be characterized by a dispersion profile matching that of the polarizer prisms' material for extraordinary and ordinary rays in the broadband spectral range. Different methods of manufacturing such broadband polarizer are described is disclosed.

WO 2005/085917 A1